JSR 371- MVC 1.0
January 30 2018

Ivar Grimstad
Christian Kaltepoth
Agenda

Goals/Non-goals
Why?
History
Technical Scope and Features
The Expert Group
Deliverables and Publicity
Schedule
Goals

1. Leverage **existing** Java EE technologies
2. Integrate with **CDI** and Bean Validation
3. Define a **solid core** to build MVC applications without necessarily supporting all the features in its first version
4. Explore layering on top of **JAX-RS** for the purpose of re-using matching and binding layers
5. Provide built-in support for **JSPs** and **Facelets** view languages
Non-Goals

1. Define a new view template language and processor
2. Support standalone implementations of MVC running outside of Java EE
3. Support REST services not based on JAX-RS
4. Provide built-in support for view languages that are not part of Java EE
WHY?
MVC Support

Should Java EE provide support for MVC, alongside JSF?

- Yes: 60.8%
- No: 19.2%
- Not sure (%): 20%

Is there any one de-facto standard technology in this space to which we should look for inspiration?

- Yes: 25.6%
- No: 21.2%
- Not sure (%): 53.2%
Revised Java EE 8 Proposal

CDI 2.0 (JSR 365)
- Bootstrap API for Java SE
- Async events
- Observer ordering

Servlet 4.0 (JSR 369)
- HTTP/2 support

JSF 2.3 (JSR 372)
- Small-scale new features
- Community-driven improvements

Security 1.0 (JSR 375)
- Authentication/authorization APIs
- OAuth, OpenID support
- Secret management

JSON-B 1.0 (JSR 367)
- JSON <-> object mapping

JAX-RS 2.1 (JSR 370)
- Reactive enhancements
- Server-sent events
- Non-blocking I/O
- Client-side circuit breakers

Management 2.0 (JSR 373)
- REST-based APIs

Bean Validation 2.0 (JSR 380)
- Collection constraints
- Date/Time support
- Community-requested features

JMS 2.1 (JSR 368)
- Flexible JMS MDBs
- Improved TXA support

MVC 1.0 (JSR 371)
- Action-based MVC framework

JSON-RPC 1.1 (JSR 374)
- JSON Pointer and Patch
- Java Lambda support

Configuration
- Standard for externalizing application configuration

Health Checking
- Standard for client-side health reporting
Rationale for Proposed Changes

New Functionality
- Cloud apps make many remote REST calls. Need a client-side circuit breaker added to JAX-RS
- Need a secret vault because there’s no way to do this today using standard
- Need OAuth and OpenID support because those technologies have rapidly emerged as standards
- Need externalized configuration store to make applications retargetable across environments
- Need basic multi-tenancy support to accommodate needs of more complex apps and offer higher density
- Need standard way of health checking Java-based apps

Dropped Functionality
- JMS is no longer very relevant in cloud. Proposed to stay at JMS 2.0 standard (vs. upgrading to JMS 2.1).
- Cloud apps often ship headless, making MVC largely irrelevant
- Current Management JSP not widely used
HISTORY

First Proposal

Expert Group starts discussions

Approved by JCP
Executive Committee

EDR 1

EDR 2

JavaOne

Transfer Ballot
TECHNICAL SCOPE AND FEATURES
```java
@View("hello.jsp")
@Controller
@Path("hello")
public class HelloController {

    @Inject
    private Greeting greeting;

    @GET
    public void hello() {
        greeting.setMessage("Hello Hursley!");
    }
}
```
• The Basics
  – Model, View, Controller

• The Extras
  – Validation and Error Handling
  – Scopes
  – Security
  – Internationalization
  – Events
THE EXPERT GROUP
## The Expert Group

<table>
<thead>
<tr>
<th>Individual Member</th>
<th>Individual Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathieu Ancelin</td>
<td>Ivar Grimstad</td>
</tr>
<tr>
<td>Neil Griffin (Liferay, Inc)</td>
<td>Joshua Wilson (RedHat)</td>
</tr>
<tr>
<td>Rodrigo Turini (Caelum)</td>
<td>Stefan Tilkov (innoQ Deutschland GmbH)</td>
</tr>
<tr>
<td>Guilherme de Azevedo Silveira (Individual Member)</td>
<td>Frank Caputo (Individual Member)</td>
</tr>
<tr>
<td>Christian Kaltepoth (ingenit GmbH &amp; Co. KG)</td>
<td>Woong-ki Lee (TmaxSoft, Inc.)</td>
</tr>
<tr>
<td>Paul Nicolucci (IBM)</td>
<td>Kito D. Mann (Individual Member)</td>
</tr>
<tr>
<td>Rahman Usta (Individual Member)</td>
<td>Florian Hirsch (adorsys GmbH &amp; Co KG)</td>
</tr>
<tr>
<td>Santiago Pericas-Geertsen (Oracle)</td>
<td>Manfred Riem (Oracle)</td>
</tr>
</tbody>
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The Expert Group

- Mailing List
  jsr371-users@googlegroups.com

- Project Page
  https://www.mvc-spec.org

- GitHub Organization
  https://github.com/mvc-spec
Issue tracker

https://github.com/mvc-spec/mvc-spec/issues

• Total number of issues?
  77

• How many in each state?
  Open 25
  Closed 52
RI and TCK development

• Specification and API
  https://github.com/mvc-spec/mvc-spec

• Reference Implementation
  https://github.com/mvc-spec/ozark

• TCK
  https://github.com/mvc-spec/mvc-tck
Other deliverables

• MVC 1.0 Cookbook
  https://www.mvc-spec.org/learn/cookbook/

• MVC 1.0 Hands-on-Lab
  https://github.com/ivargrimstad/mvc-hol

• Samples
  https://github.com/ivargrimstad/mvc-samples
IP flow

• Spec
  JCP License + Apache Software License 2.0

• RI
  Apache Software License 2.0
  When established as Eclipse Ozark:
    - Eclipse Public License 2.0
    - (Secondary) GNU General Public License, version 2 with the GNU Classpath Exception

• TCK
  Apache Software License 2.0
Publicity

MVC specification
@mvc_spec

MVC 1.0 Specification
Malmo, Sweden • mvc-spec.org

Followed by David R. Heffelfinger, Gaurav Gupta, Rahman USTA and more.
Publicity

https://www.mvc-spec.org/learn/
Mailing lists or forums

- Mailing List
  jsr371-users@googlegroups.com
• Are you participating in the Adopt-a-JSR program? Yes

• Netherlands JUG
  Review of specification

• DOAG
  Logotype, Workshop, TCK
Schedule

• Q4 2017
  – Public Review

• Q1 2018
  – Proposed Final Draft

• Q2 2018
  – Final Release
DEMO
Questions, discussion, next steps
Thank you!
http://jcp.org